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ABSTRACT

A method for locating objects, such as images having fixed aspect ratios, within a predefined space, such as a printed page, is provided. The method comprises generating a binary tree structure comprising at least one node and a plurality of leaves, each leaf corresponding to an image and being associated with one node. The method further comprises characterizing a bounding box for each node in the binary tree structure, the bounding box establishing a boundary for all leaves associated with the node. The method also comprises manipulating bounding boxes to fit within the predefined space. The method may be selectively repeated to reposition images within the binary tree structure or to reform the binary tree structure and characterize and manipulate using the reformed binary tree structure. The end result is at least one potential layout having all images located within the predefined space.